REMARKS

Claims 1-9 are all the claims pending in the application. Claims 1-9 stand presently rejected under 35 U.S.C. § 112, second paragraph. In addition, claims 1-9 are rejected under 35 U.S.C. § 102(b) as being anticipated by Harada (US Patent No. 5,594,746). Further, claims 1-9 are rejected under 35 U.S.C. § 102(b) as being anticipated by Mizuuchi et al (US Patent No. 6,002,515). Finally, claims 1 and 9 and the Abstract are objected to. By this Amendment, Applicant cancels claim 1, amends claims 2, 3, 5 and 9, and replaces the Abstract.

The Objections to Claims 1 and 9 and to the Abstract

By this Amendment, Applicant has canceled claim 1 and has corrected claim 9. In addition, Applicant's new Abstract contains the corrections requested by the Examiner on page 2 of the present Office Action. Therefore, Applicant submits that the objections to claims 1 and 9 and to the Abstract are moot and, thus, respectfully requests withdrawal thereof.

The Rejection of Claims 1-9 under 35 U.S.C. § 112, second paragraph

In view of Applicant's cancellation of claim 1, and in view of Applicant's amendments to claim 2 and to claim 9, Applicant submits that the rejections of claims 1-9 under 35 U.S.C. § 112, second paragraph, are moot and, thus, respectfully requests withdrawal thereof. These claim amendments are not intended to narrow the claims in any way. Rather, these

amendments were made solely for the purpose of clarifying the claim language so as to overcome the claim rejections under 35 U.S.C. § 112.

The Rejection of Claims 1-9 under 35 U.S.C. § 102(b) in view of Harada

Amended independent claim 2 is directed to a polarization inversion method for ferroelectrics, wherein first portions of a ferroelectric crystal, each corresponding to a corresponding one of electrodes and second portions between the first portions are subjected to a polarization inversion.

Figs. 1a and 1b of the Harada reference show a substrate 1 having a +z plane and -z plane. As shown in Fig. 1a, a periodic electrode pattern 2 is formed on side of the +z plane.[1]

Harada further teaches that "[w]hen the cross section of the substrate 1 (along the y plane) was observed, it was ascertained that all periodic domain reversals 10 evenly extend from the -z plane to the +z plane on pitches corresponding to the electrode pattern 2 at locations where the periodic electrode pattern 2 is formed."[2]

However, there is no teaching or suggestion in the Harada reference of second portions that are subjected to a polarization inversion, wherein the second portions are located between

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[1] See Harada reference, col. 4, ln. 36-48

[2] See Harada reference, col. 5, ln. 11-16; emphasis added

first portions, and wherein each of the first portions corresponds to a corresponding one of electrodes, as recited in amended claim 2.

For at least these reasons, Applicant submits that amended claim 2 is patentable over the Harada reference. Claims 3-9 are patentable at least by virtue of their dependency from claim 2.

The Rejection of Claims 1-9 under 35 U.S.C. § 102(b) in view of Mizuuchi et al.

Amended claim 2 recites that one polarization inversion portion is formed for each group of electrodes by use of periodic electrodes in which a plurality of electrode groups composed of the electrodes are periodically formed as said electrodes, thus forming a periodic polarization inversion structure in which the polarization inversion portion is periodically formed.

Thus, the claimed invention is different from Mizuuchi in employing a pitch of electrodes that differs from the pitch of polarization inversion. The drawings on the following page illustrate this difference.

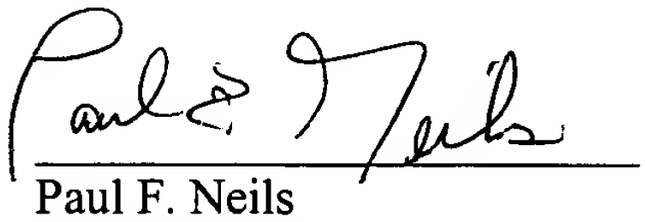
For at least these reasons, Applicant submits that amended independent claim 2 is patentable over the Mizuuchi reference. Claims 3-9 are patentable at least by virtue of their dependency from claim 2.

Conclusion

In view of the above, reconsideration and allowance of this application are now believed to be in order, and such actions are hereby solicited. If any points remain in issue which the Examiner feels may be best resolved through a personal or telephone interview, the Examiner is kindly requested to contact the undersigned at the telephone number listed below.

The USPTO is directed and authorized to charge all required fees, except for the Issue Fee and the Publication Fee, to Deposit Account No. 19-4880. Please also credit any overpayments to said Deposit Account.

Respectfully submitted,



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